

REMARKS

This is a full and timely response to the Office Action mailed July 15 2003.

By this Amendment, claims 1, 16 and 24 are amended. No claims are added or canceled. Thus, claims 1-24 are currently pending for the Examiner's consideration, with claims 1 and 16 being independent claims. Support for claim amendments can be found throughout the specification and the original claims.

Applicant believes that all pending claims are in condition for allowance. Reexamination and reconsideration in light of the above amendments and the following remarks is respectfully requested.

Objections to Drawings

The Examiner objects to the drawings submitted with the previous amendment since the Examiner believe that they contain informalities. Applicant respectfully disagrees with the Examiner in this regard.

As note in Applicant's previous response, the three sheets of Figures were submitted to assist the Examiner in understanding the claimed invention. The Figures are currently not part of the disclosure since Applicant has not requested that they be added to the disclosure. Thus, Applicant believes that the Examiner's objections are premature.

However, since the Examiner has indicated that the previously submitted Figures should be filed, Applicants have requested in this Amendment that the enclosed new Figures be inserted into the disclosure.

New Figures 1-3 correspond to that which were previously submitted and are submitted to exemplify various features of the claims. Applicant has also submitted new Figures 4-6 to also exemplify various features of the claims. Thus, no new matter has been added with these Figures.

Objections to Disclosure

Applicant has effected amendments to the specification and abstract which should be sufficient to overcome these objections. Specifically, Applicant has added a new Brief Description

of the Drawings to describe the newly added Figures. Also, Applicant has amended the phrase "*L is the rolled length of the film roll*" to *L is the length of the rolled film* as per the Examiner's request. Thus, in light of these amendments to the disclosure, this objection should be withdrawn.

Objections to Claim 1

Applicant has also amended claim 1 to "*L is the length of the rolled film*" as per the Examiner's suggestion. Thus, withdrawal of this objection is also requested.

Rejections under 35 U.S.C. §112

Claim 16 is rejected under 35 U.S.C. §112, second paragraph, for alleged indefiniteness. Applicant respectfully traverses this rejection.

However, in order to expedite prosecution, Applicant has amended claim 16 to address the Examiner concerns. Thus, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. §102

Claims 1-3 and 16-18 are rejected under 35 U.S.C. §102(b) as being anticipated by Sasaki et al. (U.S. Patent 4,576,344). Applicant respectfully traverses this rejection.

To constitute anticipation of the claimed invention under U.S. practice, the prior art reference must literally or inherently teach each and every limitation of the claims. Here, in this case, Sasaki et al. do not teach the claimed limitations "*said polyester film roll having a maximum diameter and a minimum diameter when all diameters of said roll are measured along the width direction of the roll, and the difference R between the maximum diameter value and the minimum diameter value is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, wherein, W is the width of the film roll, and L is the length of the rolled film*" and "*wherein the first maximum perpendicular line length is not more than $500 \mu\text{m}$, and the second maximum perpendicular line length is not more than $300 \mu\text{m}$.*"

The Examiner has argued in the Action that since Sasaki et al. teach a polyester film roll free from wrinkles and because the width of the roll is uniform throughout the roll, the minimum diameter value of the Sasaki et al. film roll is not more than $2W \times 10^{-33}$ and not more than $L \times 10^{-7}$.

However, the Examiner's argument is flawed since the claimed invention focuses on the difference ("R") between the maximum diameter value and the minimum diameter value and not on the uniform width of the roll.

Applicant believes that the Examiner's rejection is based on an incorrect understanding of the present invention. Accordingly, Applicant wishes to take the opportunity to explain the concept of the present invention based on the submitted Figures.

In practically all films, there are slight variations or unevenness in the thickness of the films. This unevenness accumulates as the film is rolled into a roll-like shape. Consequently, the thin portion of film is deformed into a wrinkle-like shape, while the thick portion of the film is extended and forms slacks within the roll (see Figure 5). Thus, when the film is unrolled and processed in such processes as coat processing or vacuum-deposition processing, good results cannot be obtained.

The present invention solves this problem by maintaining film rolls to a certain size and shape based on the difference between the maximum diameter value and the minimum diameter value of a film roll.

The maximum diameter value and the minimum diameter value of a film roll is determined by measuring diameters along the width direction of the film roll (see Figure 1 and 5). Such diameters can then be plotted on a graph. Since, as stated earlier, unevenness accumulates as the film is rolled into a roll-like shape, the diameters of the film roll are not uniform thereby resulting in a curved line on the graph. Using that curved line, one can identify the maximum diameter value and the minimum diameter value of a film roll (see Figure 2). With those values in combination with the length and width of the film in the roll, the size and shape of the polyester film roll of the present invention can be determined (using the formula set forth in the claims).

Another embodiment of the present invention (see Figure 3) comprises drawing a straight line between the two ends of the curved line and then drawing a first perpendicular line (with respect to the straight line) from the maximum convex area of the curved line to the straight line and drawing a second perpendicular line (with respect to the straight line) drawn from the maximum concave area of the curved line to the straight line. The lengths of the first and second perpendicular lines represent the first and second maximum perpendicular line length, respectively.

APPLICANT
MUST PROVE
EVIDENCE AS
TO WHY SACHS
DOES NOT
MEET CLAIM
-
more allegations
that it doesn't
is insufficient
-
applicant must
prove each detail
doesn't meet
claim

In the embodiment of claim 16, the size and shape of the polyester film roll of the present invention is such that the first maximum perpendicular line length is not more than 500 μm , and the second maximum perpendicular line length is not more than 300 μm . For the embodiment of claim 24, the first maximum perpendicular line length is not more than 400 μm , and the second maximum perpendicular length is not more than 200 μm .

Applicant believes that the above explanation in combination with the newly submitted Figures should enable the Examiner to fully understand all the limitations of the present claims.

From such an understanding, it is clear that Sasaki et al. fail to teach the limitations “*said polyester film roll having a maximum diameter and a minimum diameter when all diameters of said roll are measured along the width direction of the roll, and the difference R between the maximum diameter value and the minimum diameter value is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, wherein, W is the width of the film roll, and L is the length of the rolled film*” and “*wherein the first maximum perpendicular line length is not more than 500 μm , and the second maximum perpendicular line length is not more than 300 μm .*”

Sasaki et al. only teach a polyester film roll free from wrinkles by specifying roll hardness (25 microns) and centerline average surface roughness (0.001 to 0.05 microns) of the film roll using a touch roll. The reference does not at all address the deformities (wrinkles and slacks) form in a film roll cause by accumulated unevenness as the film is being rolled. Thus, it is clear that Sasaki et al. do not literally teach all the limitations of claim 1.

Sasaki et al. also fail to inherently teach all the limitations of claims 1 and 16 since the Examiner cannot provide a basis in fact and/or technical reasoning to reasonably support that the claimed limitations “*said polyester film roll having a maximum diameter and a minimum diameter when all diameters of said roll are measured along the width direction of the roll, and the difference R between the maximum diameter value and the minimum diameter value is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, wherein, W is the width of the film roll, and L is the length of the rolled film*” and “*wherein the first maximum perpendicular line length is not more than 500 μm , and the second maximum perpendicular line length is not more than 300 μm .*” necessarily flows from the teachings of the Sasaki et al.

As the Examiner already knows, the fact that a certain result or characteristic (winkle free) may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.

Thus, since Sasaki et al. fail to literally and inherently teach each and every limitation of claims 1-3 and 16-18, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. §103

Claims 4-15 and 19-24 are rejected under 35 U.S.C. §103(a) as being obvious over Sasaki et al. (U.S. Patent 4,576,344). Applicant respectfully traverses this rejection.

To establish a *prima facie* case of obviousness, the prior art references must either alone or in combination teach the invention as a whole, including all the limitations of the claims. Since, for the reasons noted above, Sasaki et al. fails to teach or suggest all the limitations of claims 1 and 16 from which claims 4-15 and 19-24 depend, this rejection also cannot be sustained and should be withdrawn.


CONCLUSION

For the foregoing reasons, all the claims now pending in the present application are believed to be clearly patentable over the outstanding rejections. Accordingly, favorable reconsideration of the claims in light of the above remarks is courteously solicited. If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. TEI-0122 from which the undersigned is authorized to draw.

Dated: October 14, 2003

Respectfully submitted,

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Attachments

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 180013 for any such fees; and applicant(s) hereby petition for any needed extension of time.
